a) **State-Chart Based Testing**

TEST CASES

senseLeverUp()

Test Case#	Input Data			Expected Output	
	WiperSpeed	**LeverPosition**	**DialPosition**	**WiperSpeed**	**LeverPosition**
1	0	OFF	1	6	INT
2	0	OFF	2	12	INT
3	0	OFF	3	20	INT
4	6	INT	1	30	LOW
5	12	INT	2	30	LOW
6	20	INT	3	30	LOW
7	30	LOW	3	60	HIGH
8	60	HIGH	1	Error	

senseLeverDown()

Test Case#	Input Data			Expected Output	
	WiperSpeed	**LeverPosition**	**DialPosition**	**WiperSpeed**	**Lever Position**
1	0	OFF	1	Error	
2	6	INT	1	0	OFF
3	12	INT	2	0	OFF
4	20	INT	3	0	OFF
5	30	LOW	1	6	INT
6	30	LOW	2	12	INT
7	30	LOW	3	20	INT
8	60	HIGH	1	30	LOW

senseDialUp ()

Test Case#	Input Data			Expected Output	
	WiperSpeed	**LeverPosition**	**DialPosition**	**WiperSpeed**	**Dial Position**
1	20	INT	3	Already on Highest	
2	6	INT	1	12	2
3	12	INT	2	20	3

senseDialDown ()

Test Case#	Input Data			Expected Output	
	Speed	**LeverPosition**	**DialPosition**	**Speed**	**Dial Position**
1	6	INT	1	Already on Lowest	
2	12	INT	2	6	1
3	20	INT	3	12	2